

SONOMA COUNTY WATER AGENCY

FISHERIES ENHANCEMENT PROGRAM



**ANNUAL REPORTS
1997-2001**

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FIGURE

FIGURE 1: RUSSIAN RIVER WATERSHED FEP PROJECTS 1997-2001 2

LIST

LIST OF FEP PROJECTS 1997-2001 3

I. INTRODUCTION

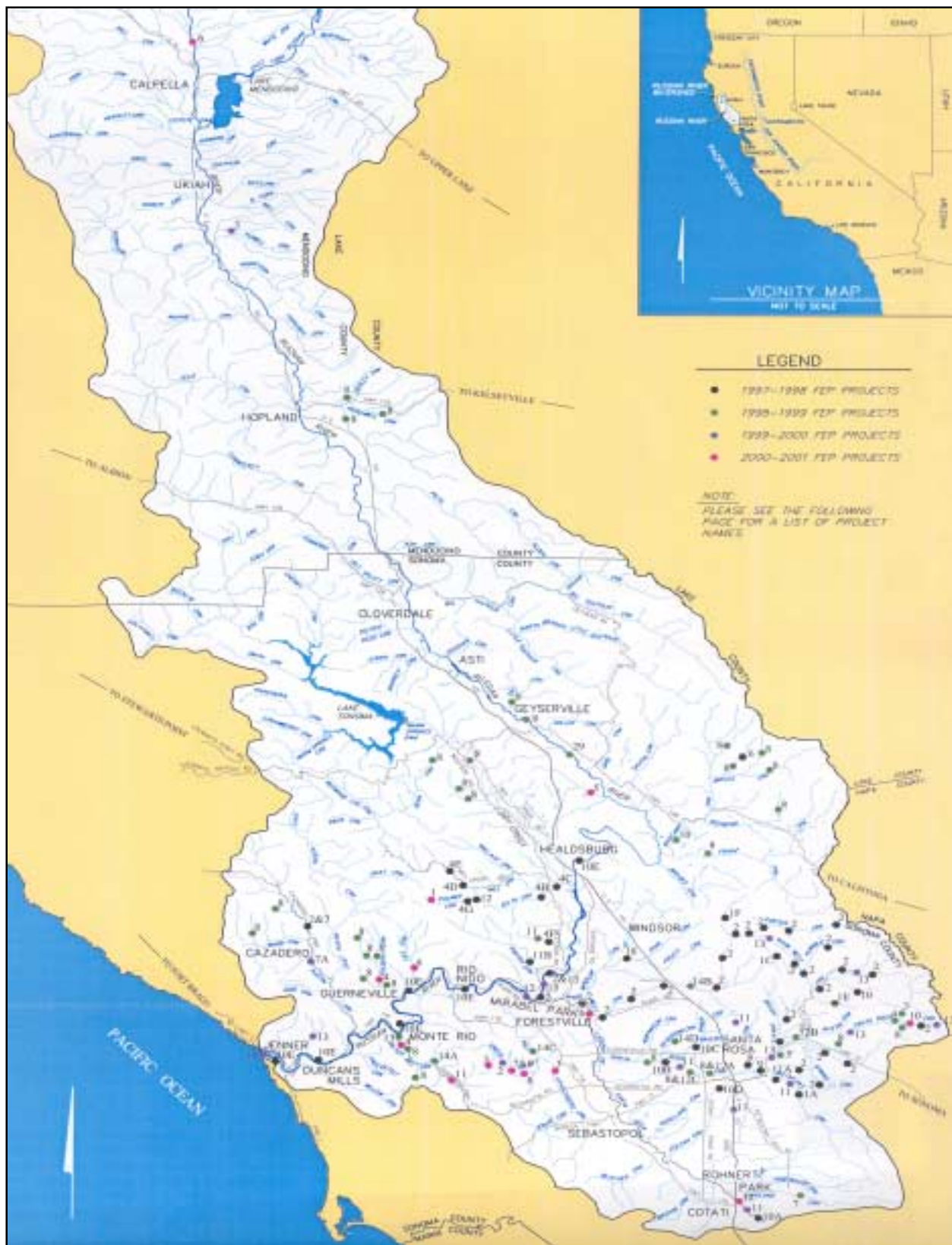
This report summarizes the activities implemented under the Sonoma County Water Agency's (Agency) Fisheries Enhancement Program (FEP) from the fiscal years¹ 1997-1998 to 2000-2001. The purpose of the FEP is to improve the native fish resources of the Russian River and its tributaries. The primary focus of the FEP is to enhance habitat for three salmonids: steelhead, chinook salmon, and coho salmon. These three species are listed as threatened under the federal Endangered Species Act and the California Department of Fish and Game (CDFG) considers these fish Species of Special Concern. The specific objectives of the FEP are

1. to work cooperatively and in conjunction with other federal, state, and local agencies to preserve, enhance and restore fishery habitats and resources;
2. to develop research programs to study the fisheries within affected watersheds; and
3. to assist the Environmental Compliance Section of the Agency in the assessment of impacts, the writing of environmental documents, and permit compliance for Agency projects which may effect fisheries resources.

To accomplish the objectives of the FEP, the Agency conducts and coordinates fishery enhancement projects and provides grants to private and public organizations as an incentive to implement enhancement projects. Typical FEP projects include stream restoration, fish surveys, habitat assessments, and other fish enhancement activities. Work Plans describe the projects funded under the FEP. These plans are prepared annually by the Agency and are approved by the Agency's Board of Directors. FEP projects are coordinated with various agencies, such as the CDFG, North Coast Regional Water Quality Control Board (NCRWQCB), National Marine Fisheries Service (NMFS), United States Fish and Wildlife Service (USFWS), and local Resource Conservation Districts (RCDs). The priorities for specific projects are established by the Agency in collaboration with CDFG and other agencies. Data collected during FEP habitat studies are provided to CDFG for entry into the Russian River Basin Plan Geographic Information System database and is accessible to other agencies through CDFG. Also, the Agency maintains all data collected for the FEP in their files.

The FEP has been quite successful since its start in 1996. During the four-year period of this report from 1997-1998 to 2000-2001, a total of 63 FEP projects were approved and funded. These activities included 40 stream restoration projects, 13 fish and habitat studies, and 10 other projects that further the FEP objectives. Figure 1 shows the location of FEP projects implemented from 1997 to 2001. This report summarizes the status of FEP projects and follows the organization of projects established in the annual FEP Work Plans.

¹ A fiscal year begins on July 1 and ends on June 30 of the following year.



LIST OF FEP PROJECTS 1997-2001
(Locations of projects are shown on Figure 1)

1997-1998 FEP PROJECTS

1. STREAM HABITAT SURVEYS
 - 1A. Matanzas Creek
 - 1B. Pool Creek
 - 1C. Mill Creek
 - 1D. Van Buren Creek
 - 1E. Weeks Creek
 - 1F. Horsehill Creek
2. TEMPERATURE COLLECTION (Sites from 1997-2001 are shown on Fig. 1)
3. PARCEL OWNERSHIP INFORMATION (Not shown on Fig. 1)²
4. INSTREAM HABITAT IMPROVEMENTS
 - 4A. Adobe Creek (Not shown on Fig. 1)³
 - 4B. Felta Creek Site 1
 - 4C. Felta Creek Site 2
 - 4D. Mill Creek Site 1
 - 4E. Mill Creek Site 2
 - 4F. Turtle Creek
 - 4G. Palmer Creek
5. NATIVE RIPARIAN PLANT HANDBOOK (Not shown on Fig. 1)²
6. RIPARIAN AREA FENCING
7. STREAM CHANNEL RESTORATION
8. WATER QUALITY SAMPLING
9. MATANZAS CREEK FISHWAY
10. NEIGHBORHOOD STREAM CLEAN-UP
 - 10A. Cotati Creek
 - 10B. Paulin and Santa Rosa Creeks
 - 10C. Paulin Creek
 - 10D. Roseland Creek
 - 10E. Russian River
11. STREAMBANK EROSION CONTROL
 - 11A. Matanzas Creek
 - 11B. Porter Creek
12. RURAL ROAD EROSION CONTROL
13. FISH RESCUE ACTIVITIES

1998-1999 FEP PROJECTS

1. PARCEL OWNERSHIP AND ACCESS INFORMATION (Not shown on Fig. 1)²
2. TEMPERATURE COLLECTION (See 1997-1998, Item 2 for locations on Fig. 1)
3. MCCORMICK/HOOD MOUNTAIN PARK FISH IMPROVEMENT
4. HOOD MOUNTAIN REGIONAL PARK: LANDSLIDE REPAIR PLAN
5. BRUSH CREEK RESTORATION
6. STREAM CHANNEL RESTORATION (See 1997-1998, Item 7 for location on Fig. 1)
7. COPELAND CREEK STREAM RESTORATION
8. WATER QUALITY SAMPLING
9. ARUNDO DONAX IN THE RUSSIAN RIVER: STUDY OF EXTENT OF THE INVASION, ECOLOGICAL IMPACTS, AND EFFECTIVE CONTROL METHODS
10. PIERCE'S DISEASE RIPARIAN MODIFICATION
11. RUSSELL IRRIGATION SITE

² Project did not involve a specific site location.

³ Project located outside of the Russian River watershed.

12. NEIGHBORHOOD STREAM CLEAN-UP
 - 12A. Santa Rosa Creek
 - 12B. Little Austin Creek
 - 12C. Santa Rosa Creek
13. RUSSIAN RIVER CLEAN-UP (See 1997-1998, Item 10E for additional locations on Fig. 1)
14. MISCELLANEOUS PROJECTS CONTINGENCY FUND
 - 14A. Dutch Bill Creek Fish Habitat Improvement
 - 14B. Huff Property Bank Stabilization
 - 14C. Green Valley Pool Habitat Improvement
 - 14D. Peterson Creek Riparian Restoration Demonstration

1999-2000 FEP PROJECTS

FEP GRANTS

1. HOOD MOUNTAIN REGIONAL PARK: SLIDE #2 REPAIR (See 1998-1999, Item 4 for location on Fig. 1)
2. GREEN VALLEY CREEK RESTORATION
3. HOWELL CREEK FENCING AND RIPARIAN ENHANCEMENT
4. INVASIVE PLANT SPECIES IN THE RUSSIAN RIVER (See 1998-1999, Item 9 for location on Fig. 1)
5. PIERCE'S DISEASE RIPARIAN MODIFICATION (See 1998-1999, Item 10 for location on Fig. 1)
6. RUSSIAN RIVER CLEAN-UP (See 1997-1998, Item 10E for locations on Fig. 1)
7. MISCELLANEOUS PROJECTS CONTINGENCY FUND
 - 7A. Austin Creek Restoration
 - 7B. Riparian Habitat Guide (Not shown on Fig. 1)²

FEP AGENCY PROJECTS

8. TEMPERATURE COLLECTION (See 1997-1998, Item 2 for locations on Fig.1)
9. BIG AUSTIN CREEK RESTORATION (See 1997-1998, Item 7 for location on Fig.1)
10. COPELAND CREEK STREAM RESTORATION (See 1998-1999, Item 7 for location on Fig.1)
11. NEIGHBORHOOD STREAM CLEAN-UP
12. MIRABEL INFLATABLE DAM/WOHLER POOL FISH SAMPLING PROGRAM
13. RUSSIAN RIVER BASIN COHO AND STEELHEAD MONITORING
14. RUSSIAN RIVER ESTUARY MONITORING PROGRAM
15. FISH RESCUE ACTIVITIES

2000-2001 FEP PROJECTS

FEP GRANTS

1. PALMER CREEK ROAD SEDIMENT REDUCTION
2. GOLD RIDGE STEWARDSHIP PROGRAM (Not shown on Fig. 1)²
3. GOLD RIDGE CREEK CLEAN-UPS
4. RUSSIAN RIVER CLEAN-UP (See 1997-1998, Item 10E for additional locations on Fig.1)
5. LYTTON CREEK RESTORATION AND EDUCATION
6. MUMFORD DAM FISH PASSAGE AND RIPARIAN RESTORATION
7. GREEN VALLEY CREEK RESTORATION (SITE 1)
8. GREEN VALLEY CREEK RESTORATION (SITE 2)
9. GREEN VALLEY CREEK RESTORATION (SITE 3)
10. HOOD MOUNTAIN FISH PASSAGE
11. DUTCH BILL CREEK RESTORATION
12. CONTINGENCY FUND

FEP AGENCY PROJECTS

13. TEMPERATURE COLLECTION (See 1997-1998, Item 2 for locations on Fig.1)
14. BIG AUSTIN CREEK RESTORATION (See 1997-1998, Item 7 for location on Fig.1)
15. COPELAND CREEK RESTORATION (See 1998-1999, Item 7 for location on Fig.1)
16. MIRABEL INFLATABLE DAM/WOHLER POOL FISH SAMPLING PROGRAM (See 1999-2000, Item 12 for location on Fig.1)
17. RUSSIAN RIVER BASIN COHO AND STEELHEAD MONITORING (See 1999-2000, Item 13 for location on Fig.1)

18. RUSSIAN RIVER ESTUARY MONITORING PROGRAM (See 1999-2000, Item 14 for location on Fig.1)
19. FISH RESCUE ACTIVITIES (See 1999-2000, Item 15 for location on Fig.1)